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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,260	06/09/2005	Peter Gravesen	6495-0108WOUS	3290

35301 7590 04/27/2007  
MCCORMICK, PAULDING & HUBER LLP  
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HARTFORD, CT 06103

EXAMINER
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DAVIS, OCTAVIA L

ART UNIT	PAPER NUMBER
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2855

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/538,260

Applicant(s)

GRAVESEN ET AL.

Examiner

Octavia Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2/5/07.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/9/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/5/07</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al (3,875,481) in view of Benslimane et al (WO 02/37660) and Severwright (4,549,093).

Regarding claims 1 and 11, Miller et al disclose a capacitive weighing mat comprising a first pressure transfer layer 11, a second pressure transfer layer 12, an elastomeric body 13 arranged between the first and second pressure transfer layers, the body having a first surface and a second surface opposed to each other, the first and second surfaces having corrugations 14 attached via layers 14, 15, a first electrode 11 arranged on the first surface and a second electrode 12 arranged on the second surface, the first and the second electrodes being connectable to external means 21 for determining the capacitance of a capacitor formed by the elastomeric body and at least one transfer layer has at least one portion of increased thickness (See Col. 2, lines 42 – 53, See Fig. 1) but does not disclose that the first and second surfaces of the elastomeric body include corrugations and the sensor elements are arranged in a row and column configuration and are formed in the common elastomeric body member, the body member constituting a continuous sequence of sensor body elements. However, Benslimane et al disclose an actuating member and method for producing the same comprising an elastomeric body 2 having first and second boundary surface layers 3, 4

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included waved-shaped protrusions (See Fig. 2). Severwright discloses a tactile sensor array comprising an array of parallel row conductors 1, an array of parallel column conductors 2, a material layer 3 disposed between the conductors (See Col. 2, lines 56 – 64), a sheet material 6 overlying the conductors, raised protrusions 7 located on the sheet for maintaining the sheet and the conductors in spaced relationship (See Severwright, Col. 3, lines 1 – 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Miller et al according to the teachings of Benslimane et al and Severwright for the purposes of, improving the mechanical extensibility of an actuating element and providing a sensor array and circuit arrangement for detecting substantially all crossing points within an area of the surface of a conductive sheet to which pressure is applied and generating electrical signals indicative of the locations of the crossing points to which pressure is applied relative to the first and second arrays (See Severwright, Col. 1, lines 44 – 50).

Regarding claim 2, in Miller et al, at least one pressure transfer layer 11, 12 has a central portion of increased thickness and, on each side of the central portion in the predetermined direction of extension of the body, an end portion of decreased thickness (See Fig. 2).

Regarding claims 3 and 4, in Miller et al, the exterior conductive layers 11, 12 are isolated from the central layer 13 (See Fig. 1, See Col. 2, lines 60 – 64).

Regarding claim 5, in Miller et al, the protrusions 30, 32 are separated by a thin web 14a which aids in the linear output capacitance change value being within a preselected limit (See Col. 2, lines 56 – 60 and Col. 3, lines 22 – 28).

Regarding claims 6 and 7, in Miller et al, the thickness of the pressure transfer layer (0.070 inch) is substantially equal to the thickness of the elastomeric body (0.050 inch) (See Col. 2, lines 46

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– 49 and Col. 4, lines 18 – 24) and the layers have similar elastomeric properties (See Col. 2, lines 43 – 46).


*Response to Arguments*

3. Applicant's arguments with respect to these claims have been considered but are moot in view of the new grounds of rejection.


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Octavia Davis whose telephone number is 571-272-2176. The examiner can normally be reached on Mon through Thurs from 9 to 5. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz, can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
OD/2855

4/25/07

  
MICHAEL CYGAN, P.H.D.  
PRIMARY EXAMINER